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EDITORIAL

TOBACCO AND PULMONARY CANCER

THE sharply increased and increasing incidence of cancer of the lung within the last quarter of a century is a well-recognized phenomenon in many parts of the world. For some time the increase was thought to be explicable on the grounds of improved diagnosis; but, even if that were still to be accepted, it cannot be the whole explanation. It is natural to look for the cause in something which is directly associated with the respiratory tract, which can be considered as able to produce cancer and has itself shown a striking increase in employment. Such a factor might be tobacco smoking, and it has been receiving very close scrutiny in the last decade or more, although much of the literature is conflicting and inconclusive because proper analysis of the data is lacking. Two reports have recently appeared,[1, 2] one on each side of the Atlantic, which bring out certain points quite clearly. In the first of these, by Wynder and Graham, the incrimination of excessive smoking, especially of cigarettes over a long period, is strongly suggested by the following facts: (1) the rarity of cancer in a male patient who has not been at least a moderately heavy smoker for many years; (2) the much greater use of cigarettes amongst patients with pulmonary cancer than amongst other patients of comparable age and economic standing; (3) the sex distribution of pulmonary cancer corresponds roughly to the ratio of long-term smoking habits of the two sexes; (4) the tremendous parallel increase of the sale of cigarettes and of the increase in this form of cancer. A series of 605 male cases of bronchogenic carcinoma was analyzed, with control groups, three independent studies being carried on. The data were so uniform as to allow of similar conclusions in each of them.

An inquiry along somewhat similar lines was also carried out by Doll and Hill in a group of London hospitals, a series of 649 men and 60 women being interviewed, with controls. The infrequency of pulmonary cancer in the non-smokers was again emphasized—0.3% of the men, and 31.7% of the women; and amongst the smokers a relatively high proportion of those with carcinoma of the lung were in the heavy smoking group. Cigarettes were more closely associated with cancer than pipe smoking, and inhaling did not seem to be an associated factor —a conclusion at variance with the views of Wynder and Graham.

In neither report could a simple time relationship be deduced between increased smoking and the increasing number of deaths from cancer of the lung. Perhaps part of the increase may be due to improved diagnosis, but it may also be that the alleged carcinogen in tobacco smoke comes from substances introduced into the tobacco during cultivation or preparation as a result of changing methods in the last 50 years. There is nothing to show what the carcinogen may be.

A study by Professor Dungal[3] of Iceland further emphasizes the relationship between pulmonary cancer and cigarette smoking. He shows that in Iceland pulmonary cancer is rare; he found only 0.6% in a series of nearly 2,000 necropsies. At the same time, consumption of tobacco in Iceland until the beginning of the last war was extremely low. Now, however, it is rising rapidly, and with the lag in time which seems to be required for the effects of cigarette smoking the next ten or fifteen years may see the increase in pulmonary cancer in that country which has taken place elsewhere with a high rate of tobacco consumption.

Nothing more definite can be said now than that there seems to be strong grounds for presuming that tobacco, especially in the form of cigarettes, is an important factor in the causation of cancer of the lung. Those who wish to smoke will have a somewhat dubious comfort in reflecting that the evidence is not conclusive, and also that heavy smokers do not necessarily develop cancer of the lung; and those against

1. WYNDER, E. L. AND GRAHAM, E. A.: *J. A. M. A.*, **143**: 329, 1950.
2. DOLL, R. AND HILL, A. B.: *Brit. M. J.*, p. 739, Sept. 30, 1950.
3. DUNGAL, N.: *Lancet*, **2**: 245, 1950.

smoking will have further ammunition of a kind. In either case time, as usual, will be a most important element in helping to settle the problem.

Editorial Comment

Empire Medical Advisory Bureau

Members are again reminded of the welcome extended by the Empire Medical Advisory Bureau of the British Medical Association to overseas visitors to Great Britain. The Bureau wishes to make visitors at home and to help them in any way possible during their stay: guidance as to housing, food rationing, customs, etc., is offered. In addition the Bureau will supply detailed information regarding post-graduate education. All inquiries should be addressed to Dr. H. A. Sandiford, M.C., D.P.H., Medical Director, Empire Medical Advisory Bureau, B.M.A. House, Tavistock Square, London, W.C.1.

ASSOCIATION NOTES

PRESIDENTIAL ADDRESS

H. B. Church, M.D.
Aylmer, Que.

I am highly conscious of the great honour conferred on me tonight—an honour which through me has been conferred on all the general practitioners of Canada. My thanks go particularly to the men of my native Province "La Belle Quebec" for having nominated me to this high office. My thanks to my confrères from all parts of Canada for supporting my nomination.

The Canadian Medical Association has been and still is a tower of strength to doctors all across Canada. All honour to the founders whose vision provided us with a strong staff to lean on.

These founders probably took their text from Proverbs 29: 18: "Where there is no vision the people perish". They decided to have vision, with the result you see today, ten provinces bound together for the advancement of the healing art.

Like Rome our association was not built in a day. Started on a solid foundation, little by little our predecessors have builded solidly. At its inception our association was like a small still pool into which a pebble was tossed causing circles of water to spread out until now every province has been reached and all are members.

New ideas, problems and developments have arisen; these have been studied and worked on by our committees and gradually solved not by any one man but by the combined efforts of your representatives from across the Dominion. In our democratic Association every man may speak his piece.

Present day unrest, wars and rumours of wars are adding to our burden of responsibility. We grumble at the increased load but agree with William James when he said—"The greatest use of life is to spend it for something which outlasts it".

To the recent graduates and to CAMSI I would say; read the history of the Canadian Medical Association so that you will realize that all the benefits, which you enjoy today, were provided for you by the vision, labour, money and self-sacrifice of our forefathers, who well might say to us and our young graduates the words of Dr. John McCrea: "To you from failing hands the torch we throw; be yours to hold it high".

Our Association has gained a high place in the social and economic life of our country; chiefly because our members have been, and I hope, always will be ready and willing to shoulder other responsibilities beside those of their profession such as guiding public opinion in their communities, their provinces and even on the Federal level.

As a profession, we are sworn to strive, to give to our people the best medical care available. This is a big undertaking that requires constant reading study and refresher courses to keep abreast of the new developments.

It has been our aim to give the best possible quality of medicine to our people. To do this our teaching schools provide the foundation, our hospitals the superstructure and our Association offers to keep the doctors up to date through our extramural courses and travelling teams of speakers in rural areas, and at our Provincial and Dominion meetings.

Our people, those who can and those who cannot pay, have been clamoring for more and better care and all for less money. Our Association has studied the situation, many of our members have set up, independent of the C.M.A., plans for medical care, on a non-profit basis, at the lowest possible cost consistent with good service. These plans have worked well in the large towns and cities. In the country, districts the plans cannot apply because a large enough group cannot be enrolled. There is also the question of mileage.

For the country something else is needed. Just what? At the moment I am not prepared to say. It could be a good country doctor.

The plans for hospital care have been eagerly bought by our people, to the point that